

REMARKS

In the Office Action dated June 7, 2002, the Examiner indicated on page 4, in paragraph 3 that Claims 6-9 and 14-16 would be allowable if rewritten in independent form. Accordingly, Claims 6, 7 and 14 have been rewritten and are believed to be in form for allowance. Note that Claim 14 has also been amended to replace the old limitation of "the second number being a multiple of the first number" with the new limitation of "the second number being greater than the first number." Claims 8, 9, 15 and 16 depend from one of these rewritten claims and are therefore also in form for allowance. For this reason, Applicant submits that the following remarks do not apply to the just-discussed claims.

Claims 17-19, 1-3 and 10-13 were rejected in paragraph 2 on page 2 of the Office Action, as being obvious over the combined teachings of Kudo (USP 5,148,429) and Brent (USP 5,315,591). In rejecting these claims, the Examiner stated (emphasis added):

What Kudo fails to teach is the transmission of variable length packets. Brent teaches a processor (Fig. 2@9) for converting packets variable length frames. Brent does not teach how the variable length packets are generated i.e. a processor that uses information of a first duration as payload in each of the packet s prior to the occurrence of a predetermined event, and uses information of a second duration as payload after occurrence of the predetermined event. However a **the terms information of first duration and second duration as payload refer to packets of variable length** which is taught by Brent.

...

Applicant submits that the claim term "duration" has been misunderstood in the above-quoted text. The term "duration" cannot necessarily be equated to packet length at least because Applicant explicitly stated in the originally-filed application that "The information duration is the length of time needed to play out the information in real time, **not the actual number of bytes**. The number of bytes of the information being transmitted per unit of time is dependent on the codec being employed, but is independent of the payload size." (Emphasis added; See specification at page 8, lines 11-14).

Applicant is not generally claiming packets of variable size, but is specifically

claiming use of “information of a first duration ...” and “information of a second duration” as recited in Claim 17. Applicant’s use of the just-quoted language of Claim 17 cannot be ignored in interpreting the scope of this claim so broadly as to cover any prior art use of variable size packets.

Specifically, Applicant submits that Brent’s variable length packets have nothing to do with changing the duration of information carried therein. Instead, Brent indicates that it is the resolution of the information that is changed, at least because Brent teaches that enhancement blocks (which are to be discarded under congestion conditions) contain less significant bits (see Brent’s column 1, lines 20-24). Brent merely teaches discarding of enhancement blocks (i.e. discarding of less significant data). As would be apparent to the skilled artisan, duration of information can remain the same even when resolution is changed and vice versa. Applicant submits that there is no suggestion whatsoever in Brent’s teachings (or for that matter in the teachings of Kudo) that the duration of information is to be changed.

Applicant also submits that the Examiner’s motivation for modifying the teachings of Kudo (to use the teachings of Brent) is improper. Specifically, there is nothing in the teachings of Kudo to indicate a need to change Kudo’s packets for transmission on frame relay networks as stated by the Examiner in the middle of page 3 of the above-identified Office Action. In this context, Applicant brings to the Examiner’s attention the following remarks by the Court of Appeals for the Federal Circuit (CAFC) in the case 97-1492 (Serial No. 07/888,791) IN RE DENIS ROUFFET, YANNICK TANGUY and FREDERIC BERTHAULT, decided July 15, 1998:

As this court has stated, “virtually all [inventions] are combinations of old elements.” *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 698, 218 USPQ 865, 870 (Fed. Cir. 1983); see also *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579-80, 219 USPQ 8, 12 (Fed. Cir. 1983) (“Most, if not all, inventions are combinations and mostly of old elements.”). Therefore an examiner may often find every element of a claimed invention in the prior art. If identification of each claimed element in the prior art were sufficient to negate patentability, very few patents would ever issue. Furthermore, rejecting patents solely by finding prior art corollaries for the claimed elements would permit an examiner to use the claimed

invention itself as a blueprint for piecing together elements in the prior art to defeat the patentability of the claimed invention. Such an approach would be "an illogical and inappropriate process by which to determine patentability." *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996).

To prevent the use of hindsight based on the invention to defeat patentability of the invention, this court requires the examiner to show a motivation to combine the references that create the case of obviousness. In other words, the examiner must show reasons that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed.

See Rouffet, 149 F.3d at 1357, 47 USPQ2d at 1459.

Although Brent teaches the use of "frame relay" Applicant submits that there appears to be no reason to convert Kudo's packets for use in frame relay, at least because Kudo's teachings appear to be self-sufficient. If the Examiner continues the rejection, Applicant respectfully requests the Examiner to point out a prior art reference (e.g. column and line number in Kudo) that provides a reason for use of frame relay or some other reason to use Brent's teachings. Absent such a reason, a leap should not be made from Kudo's teachings to Brent's teachings.

Applicant submits that Claim 17 is patentable over the teachings of Kudo and Brent for at least one or more of the above-discussed reasons. In addition, Applicant submits that all other Claims 18, 19, 1-5 and 10-13 which were rejected over the teachings of Kudo and Brent are also patentable for at least one or more of the above-discussed reasons.

Claim 18 was rejected over the teachings of Kudo and Brent for the same reasons as Claim 17 (see bottom half of page 3 of the above-identified Office Action), the Examiner stating "The predetermined event that produces variable length packets is directly related to the amount of voice traffic and delay sensitivity of the network. Hence the predetermined event that causes one packet to be longer than the preceding packet will depend of the amount of voice data being packetized and the amount of the delay the

network can tolerate.” Applicant submits that there is no support in the teachings of Kudo or Brent for the just-quoted remark made by the Examiner, and requests the Examiner to specifically cite a prior art reference for this remark.

Furthermore, Applicant submits that the Examiner cannot ignore the explicit language recited in Claim 18, specifically that “the predetermined event is related to processing requirements of said processor.” As would be apparent to the skilled artisan, the processing requirements of a specific processor may remain the same even when the load on the network increases (or decreases) and vice versa. On the other hand, the load on a specific processor depends on a number of factors, such as the rate of packets transmitted and/or received by the processor which may go up (or down) regardless of the network load. Claim 18 is believed to be patentable for at least the above-described additional reasons.

Moreover, Claim 19 was rejected by the Examiner stating that “conversion of packet to frame relay achieves this limitation” (see bottom of page 3 of the Office Action). Applicant submits that the only cited reference related to frame relay, namely the teachings of Brent, is contrary to the claim limitations. Specifically, Claim 19 states that when there is a deterioration in performance of the processor, the second duration is longer than the first duration. As stated in the specification if everything else stays the same, such an increased duration results in an increased packet size. Brent teaches just the opposite, specifically that a packet is discardable (see column 1, line 60), or that packet size is reduced (see column 2, lines 12-13). Claim 19 is believed to be patentable for at least this additional reason.

Regarding the Examiner’s remark on Claim 3 (see top of page 4 of the Office Action), Applicant submits that Claim 3 should be read in combination with Claim 1 from which it depends. Specifically, Applicant is not claiming a simple multiplex capability as suggested by the Examiner’s remark. Instead, Claim 3 states that information for the second packet which is formed after the predetermined event (as per Claim 1) is of a different duration than information for the first packet, and furthermore that the two packets contain information generated by two different information

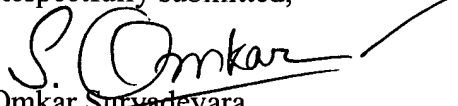
generators. Therefore, a change in information duration need not be limited to a single information generator, but can be applied to whichever generator is active for example.

New Claims 21 and 22 are believed to be patentable for reasons similar to those discussed above in reference to Claim 19. Specifically, Claim 21 recites that when there is a “deterioration in performance, and the second duration is longer than the first duration” (emphasis added). As noted above, Brent teaches just the opposite, specifically that a packet is discardable, or that packet size is reduced under congestion conditions. Moreover, Claim 22 explicitly states that “the second packet has a larger payload than the first packet” when there is deterioration in performance.

In view of the above remarks, Applicant submits that all Claims 1-22 are in form for allowance and allowance thereof is respectfully requested. If there are any questions, please call the undersigned at (408) 982-8200, extension 3.

EXPRESS MAIL LABEL NO.:
ET 887 719 228 US

Respectfully submitted,


Omkar Suryadevara
Attorney for Applicant(s)
Reg. No. 36,320

ATTACHMENT A

(Version with markings to show changes made)

1. (Unamended) A method for transmitting streaming information in a packetized format, the method comprising:
forming a first packet containing information generated over a first duration; and
in response to a predetermined event, forming a second packet containing information generated over a second duration, the second duration being longer than the first duration.
2. (Unamended) The method of Claim 1 wherein:
information for the first packet and information for the second packet is received from a common information generator.
3. (Unamended) The method of Claim 1 wherein:
information for the first packet is generated by an information generator different from another information generator that generates information for the second packet.
4. (Unamended) The method of Claim 1 wherein:
the predetermined event includes an increase beyond a predetermined threshold of processing requirements in a device that receives the first packet and the second packet.
5. (Unamended) The method of Claim 1 wherein:
the predetermined event includes an increase beyond a predetermined threshold in processing requirements in a device that transmits the first packet and the second packet.
6. (Amended) [The method of Claim 5] A method for transmitting streaming information in a packetized format, the method comprising:
forming a first packet containing information generated over a first duration; and

in response to a predetermined event, forming a second packet containing information generated over a second duration, the second duration being longer than the first duration;

wherein the predetermined event includes an increase beyond a predetermined threshold in processing requirements in a device that transmits the first packet and the second packet; and

wherein information included in the first packet forms a portion of a first stream between a source device and a destination device, and the source device transfers additional information in at least one additional stream to or from another destination device, the method further comprising:

determining occurrence of the predetermined event when a predetermined number is exceeded by a total number of streams, including the additional stream and the first stream.

7. (Amended) [The method of Claim 1 further comprising:] A method for transmitting streaming information in a packetized format, the method comprising:
forming a first packet containing information generated over a first duration;
in response to a predetermined event, forming a second packet containing information generated over a second duration, the second duration being longer than the first duration;

receiving a third packet; and

determining occurrence of said predetermined event based on the third packet.

8. (Unamended) The method of Claim 7 wherein the third packet includes information to be played over a duration longer than the first duration, the method includes:

using the longer duration to decide occurrence of said predetermined event.

9. (Unamended) The method of Claim 8 wherein:
information in the third packet is part of a conference call.

10. (Unamended) The method of Claim 1 wherein:
the first packet has a first size; and
the second packet has a second size, the second size being larger than the first size.

11. (Unamended) The method of Claim 1 further comprising:
forming said first packet and said second packet in conformance with UDP protocol of Internet.

12. (Unamended) The method of Claim 1 further comprising:
digitizing audio to generate the information.

13. (Unamended) The method of Claim 12 further comprising:
encoding the audio subsequent to digitizing.

14. (Amended) [The method of Claim 1] A method for transmitting streaming information in a packetized format, the method comprising:
forming a first packet containing information generated over a first duration;
in response to a predetermined event, forming a second packet containing
information generated over a second duration, the second duration being longer than the
first duration;

wherein:

the information includes a plurality of snippets, each snippet having information received over a predetermined duration; and

the first packet includes a first number of snippets and the second packet includes a second number of snippets, the second number being [a multiple of] greater than the first number.

15. (Amended) The method of Claim [14] 20 wherein:
the multiple is 2.

16. (Unamended) The method of Claim 14 further comprising maintaining a jitter buffer within a range defined by a maximum size and a minimum size by:

adding two copies of a snippet to the jitter buffer if a current size of the jitter buffer is smaller than a minimum size;

dropping a snippet if the current size of the jitter buffer is larger than a maximum size; and

adding the snippet to the jitter buffer if the current size of the jitter buffer is between maximum size and minimum size.

17. (Unamended) A device including:

a memory;

an information controller coupled to the memory for storing information in the memory;

a packet controller coupled to the memory for transmitting a plurality of packets stored in the memory; and

a processor that uses information of a first duration as payload in each of said packets prior to occurrence of a predetermined event, and uses information of a second duration as payload after occurrence of the predetermined event.

18. (Unamended) The device of Claim 17 wherein:

the predetermined event is related to processing requirements of said processor.

19. (Amended) The device of Claim 18 wherein:

the predetermined event is related to deterioration in performance of the processor; and

the second duration is longer than the first duration.

20. (New) The method of Claim 14 wherein:

the second number is a multiple of the first number.

21. (New) A method for transmitting streaming information in a packetized format, the method comprising:

forming a first packet containing information generated over a first duration; and
in response to a predetermined event, forming a second packet containing
information generated over a second duration;

wherein the predetermined event is related to deterioration in performance, and
the second duration is longer than the first duration.

22. (New) The method of Claim 21 wherein:

the second packet has a larger payload than the first packet.